## METHOD AND APPARATUS FOR IMPROVING VOICE QUALITY IN A PACKET BASED NETWORK

## ABSTRACT OF THE DISCLOSURE

Some embodiments of the invention adaptively adjust to the current call load in a packet based virtual circuit to minimize the delay experienced by the first packets of any talk spurt for a particular active call. Some embodiments of the invention minimize the jitter introduced by multiplexing voice packets by smoothing out the waiting time experienced by each of the voice packets. Some embodiments of the invention effectively minimize jitter when the number of active calls on a virtual circuit drops off suddenly. Some embodiments of the invention are able to differentiate signaling packets indicating a telephony event from voice packets and give the signaling packets expedited processing with no delay contributed by the subcell multiplexing process. Other embodiments of the invention are described in the claims.